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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/710,085	11/10/2000	Nimal G. Senarath	1412.64700	4025

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EXAMINER

TRAN, TUAN A

ART UNIT	PAPER NUMBER
2682	13

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,085

Applicant(s)

SENARATH ET AL.

Examiner

Tuan A Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-4 and 8-27 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4, 13-21 and 23-33 of copending Application No. 09/939,231. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 1-4 of the instant application are identical with claims 1-4 of the copending Application No. 09/939,231.

Claims 8-16 of the instant application are identical with claims 13-21 of the copending Application No. 09/939,231.

Claims 17-27 of the instant application are identical with claims 23-33 of the copending Application No. 09/939,231.

Allowable Subject Matter

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1. Claim 1-4 and 8-27 would be allowable if rewritten or amended to overcome the statutory type (35 U.S.C. 101) double patenting rejection, set forth in this Office action.

Regarding claims 1-4, the closest prior art to the claimed subject matter is Tong et al. (2001/0034236). Tong discloses a wireless communications system comprising: at least four beam formers arranged within a cellular communications network, the beam formers including a first beam former for transmitting into a first area, a second beam former for transmitting into a second area, a third beam former for transmitting into a third area and a fourth beam former for transmitting into a fourth area; and a switching center for controlling signals transmitted from the at least beam formers to a plurality of user terminals in four areas such that transmission to the adjacent areas do not occur during the same time intervals. However, none of prior arts of record shows each of the first, second, third and fourth beam area are divided into at least two sub-areas such that the first beam area includes sub-areas G11 and G12, the second beam area includes sub-areas G12 and G22, the third beam area includes sub-areas G13 and G23, and the fourth beam area includes sub-areas G14 and G24 and wherein during a first time period, simultaneous transmissions are made for receipt by mobile units located within sub-areas G11, G12, G13 and G14; during a second time period, transmissions are made for receipt by mobile units located within sub-areas G21 and G24; and during a third time period, transmissions are made for receipt by mobile units located within sub-areas G22 and G23.

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Regarding claims 8-27, the closest prior art to the claimed subject matter is Tong et al. (2001/0034236). Tong discloses a wireless communications system comprising: at least four beam formers arranged within a cellular communications network, the beam formers including a first beam former for transmitting into a first area, a second beam former for transmitting into a second area, a third beam former for transmitting into a third area and a fourth beam former for transmitting into a fourth area; and a switching center for controlling signals transmitted from the at least beam formers to a plurality of user terminals in four areas such that transmission to the adjacent areas do not occur during the same time intervals and coding signals for receipt by a particular user terminal based on its own channel quality . However, none of prior arts of records shows each of the beams are divided into at least two sub-areas and coding signals of each beam for receipt by a particular mobile unit based upon which sub-area the particular mobile unit is located within.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- Searle (6,397,082) discloses beamed antenna system.
- Lopes et al. (6,453,176) discloses antenna array system.
- Schlekewey et al. (6,181,276) discloses sector shaping transition system and method.
- Eswara et al. (6,597,927) discloses narrow beam traffic channel assignment method and apparatus.

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- Ward et al. (6,167,286) discloses multi-beam antenna system for cellular radio base stations.
- Feuerstein (6,070,090) discloses input specific independent sector mapping.
- Solondz et al. (6,314,305) discloses transmitter/receiver for combined adaptive array processing and fixed beams switching.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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Tuan Tran

Au 2682


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

5/3/04